

APPLICANT(S): B. Carmeli, et al.
SERIAL NO.: 10/699,081
FILED: October 31, 2003
Page 7

REMARKS

The present response is intended to be fully responsive to all points of objection and/or rejection raised by the Examiner and is believed to place the application in condition for allowance. Favorable reconsideration and allowance of the application is respectfully requested.

Applicants assert that the present invention is new, non-obvious and useful. Prompt consideration and allowance of the claims is respectfully requested.

Status of Claims

Claims 13, 14, 17, 18 and 21 have been amended in order to further define what the Applicants consider to be the invention. Applicants respectfully assert that no new matter has been added. The subject matter of the amendments is consistent with Paragraphs 12 and 14 of the Specification herein. Claim 20 has been cancelled, without prejudice or disclaimer.

Claims 13 - 19 and 21 are pending herein.

The Telephone Interview

Initially, Applicants wish to thank the Examiner, Kevin Mew, for granting and attending the telephone interview, with Applicants' Representative, Heidi M. Brun, Reg. No. 34,504 on September 3, 2008. In the interview, 13, 13 and 18 were discussed, as was the Rajkumar reference.

CLAIM REJECTIONS

35 U.S.C. § 102 Rejections

In the Office Action, the Examiner rejected claims 13 – 21 under 35 U.S.C. § 102(e), as being anticipated by Rajkumar (US Patent 7,391,769). Applicants respectfully traverse this rejection in view of the remarks that follow.

As explained herein, sending short messages at high rates on data networks causes inefficient utilization of end-to-end network resources. The processor on the transmitting end and the Network Interface Card (NIC) of the transmitting unit perform a fixed amount of processing work for each message, irrespective of the length of the message. The receiver end behaves the same way. The longer the message is, the fewer the resources consumed by the receiver, per unit length. If messages are aggregated into large bundles and each bundle is transmitted as a single packet, the transmitter must wait until enough short messages accumulate before transmitting the bundle. This can cause unacceptable delays at the receiver.

As taught herein, the aggregation thread receives short messages from an application or "upper layer" and aggregates a group of them into a packet. Then, the aggregated packet is inserted into a pending queue. Packets are removed from queue and passed on to the NIC, which, in turn, may transmit them to the network.

Further, while Rajkumar teaches that "the aggregate packet is based on user service requirements criteria, such as channel availability, channel conditions, user priority, and similar such parameters", (Column 3, lines 35-40) it does not teach anything about transmitting or selecting "partially aggregated data packets" (as recited in claims 13, 14 and 18).

Column 6, lines 52 - 67 of Rajkumar discuss how N (the number of packets) may be determined. The value of N (the number of packets) may be based on system loading (Column 6, lines 29-32). N may change, but, once N is set, all transmitted packets have N smaller packets therein. There is no teaching of utilizing "partially aggregated packets", nor is there any teaching of adjusting the aggregated packets based on the activity or congestion of the NIC or network.

Rajkumar has no such teaching. While it discusses aggregating messages, the transmission is without regard to NIC activity or congestion. Instead, it is based on the time-intolerant information. In particular, "the aggregated packet can be transmitted at a rate different than the fixed rate of the time delay-intolerant information." (Column 3, lines 46-49).

APPLICANT(S): B. Carmeli, et al.
SERIAL NO.: 10/699,081
FILED: October 31, 2003
Page 9

In view of the foregoing amendments and remarks, the pending claims are deemed to be allowable. Their favorable reconsideration and allowance is respectfully requested.

Should the Examiner have any question or comment as to the form, content or entry of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

If any fee is due, the undersigned hereby authorizes the United States Patent and Trademark Office to charge the fees to Deposit Account 09-0468.

Respectfully submitted,

By: /Suzanne Erez/
Suzanne Erez
Reg. No. 46,688
Phone No. (972) 4-829-6069

Date: 3 November 2008
IBM Corporation
Intellectual Property Law Dept.
P. O. Box 218
Yorktown Heights, New York 10598